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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/455,955	12/07/1999	BRADLEY CAIN	120-241	5780
34845	7590	07/20/2011		
Anderson Gorecki & Manaras LLP				
33 NAGOG PARK				
ACTON, MA 01720				
EXAMINER				
DUONG, DUC T				
ART UNIT		PAPER NUMBER		
2467				
NOTIFICATION DATE		DELIVERY MODE		
07/20/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

09/455,955

**Applicant(s)**

CAIN, BRADLEY

**Examiner**

DUC DUONG

**Art Unit**

2467

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 7-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 7-31 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see pages 7-14, filed July 27, 2004, with respect to claims 1-3 and 7-31 have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejections of the claims have been withdrawn.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 7-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding to claims 7-14, these claims recited for "a device...comprising a link state routing protocol...". And such link state routing protocol (noted protocol is consider as software per se) discloses in the specification can be implemented via programming language (page 7 line 25-page 8 line 1). Thus, the examiner has given the broadest interpretation that the claims are directed to software per se, and as such the claims are rejected for failing to meets one of the four patent eligible subject matter categories.

Regarding to claims 15-22, these claims recited for a "computer readable medium" and such medium fails to explicitly recited in the claim as being "non-transitory". Thus, the examiner has given the broadest interpretation that the medium include carrier wave or signal. And claims that recite nothing but the physical

characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14.

Regarding to claims 23-29, these claims recited for "a system...comprising a node includes a link state routing protocol...". And such link state routing protocol (noted protocol is consider as software per se) discloses in the specification can be implemented via programming language (page 7 line 25-page 8 line 1) and such node given the broadest interpretation can be implemented via software. Thus, the examiner has given the broadest interpretation that the claims are directed to software per se, and as such the claims are rejected for failing to meets one of the four patent eligible subject matter categories.

Regarding to claims 30-31, these claims recited for "a link state routing protocol comprising a sliding window mechanism". And such a link state routing protocol (noted protocol is consider as software per se) and sliding mechanism disclose in the specification can be implemented via programming language (page 7 line 25-page 8 line 1). Thus, the examiner has given the broadest interpretation that the claims are directed to software per se, and as such the claims are rejected for failing to meets one of the four patent eligible subject matter categories.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Saleh et al (US Publishing 2003/0058804 A1).

Regarding to claim 1, Saleh discloses a method (fig. 6) for distributing link state information by a node to a neighbor in a communication system, the method comprising sending a first link state advertisement protocol message (multiple LSAs are sent in HELLO message) to the neighbor (page 8 paragraph 0099), and sending a second link state advertisement protocol message to the neighbor prior to receiving an acknowledgement message from the neighbor for the first link state advertisement protocol message (page 11 paragraph 0121; noted the exchange (LSAs) are transmitted repeatedly until a valid ACK is received from neighbor node)

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 30 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Nader et al (US Patent 7,342,897 B1).

Regarding to claim 30, Nader discloses a network verification tool (fig. 1) comprising a link state routing protocol (fig. 6E col. 18 line 47 col. 19 line 15) and a sliding window mechanism (fig. 5A col. 13 lines 46-54).

Regarding to claim 31, Nader discloses open shortest path first (OSPF) routing protocol logic (col. 18 line 47-coll 19 line 15) in combination with the sliding window mechanism (col. 13 lines 46-54).

#### ***Allowable Subject Matter***

8. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 7-29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC DUONG whose telephone number is (571)272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Phillips can be reached on 571-272-3940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. D./  
Examiner, Art Unit 2467

/HASSAN PHILLIPS/  
Supervisory Patent Examiner, Art  
Unit 2467